

Architecture Studio Competition
Flood Resistant Infill Housing for the East End Garden District
Spring Semester 2015
Issued 23 January, 2015

The purpose of the architecture competition, Housing for East End Garden District, is to create in-fill housing designs that will enable the East End Garden District to reach its potential as a highly attractive neighborhood, peacefully coexisting with surrounding nature while retaining the conveniences of urban living. While that is a worthy project in itself, the competition has the potential to identify flood plain housing prototypes applicable throughout the City of Cincinnati and beyond since, many desirable building locations are flood prone. Solutions to this conundrum have the potential to stimulate neighborhood growth and economic development in our region as well as become a model for other communities throughout the nation.

Sponsorship

This competition is sponsored by the East End Area Council, Michael Bolan, Barb Lichtenstein, Melisse May, and The Sawyer Place Company.

The competition is administered by the University of Cincinnati Niehoff Urban Studio and Community Design Center and is open to any student of the University 3rd year and above including those in the College of DAAP School of Architecture and Interior Design, the School of Planning, the School of Design, as well as the College of Engineering and Applied Sciences.

Challenge

To tackle architectural design and building challenges for new single-family in-fill housing addressing City of Cincinnati floodplain restrictions and to create an aesthetic appearance that relates to the existing scale and circulation system. Depending on the exact land elevation, livable housing space must be elevated up to 12 feet, potentially a stark contrast to the existing neighborhood context. The essence of the challenge is to provide design concepts that meet the elevation requirements but “blend” into the neighborhood aesthetically. Key considerations include:

Can such a house allow for aesthetic, innovative architectural expression and at the same time complement the existing neighborhood context?

Is the house inherently functional, comfortable and inviting for future inhabitants?

Can this house be constructed to minimizing its ecological footprint?

Can this house be constructed for everyday life in the floodplain without impeding river overflow?

Does the house encourage interaction between residents to create a sense of community place?

Is this house affordable to middle class families, the foundation of every stable neighborhood?

Can the house design be used as a prototype applicable to single and multiple lots throughout the Garden District?

Does this house take into account the existing street and alley system?

Purpose:

The goal of the competition is to provide the East End with new design prototypes for in-fill, single family housing for the East End and for future projects in Cincinnati. The competition seeks innovation in single family and live-work residences that are affordable, sustainable, beautiful, accessible, and with flood-proof design.

In this competition, students will be engaged in an applied design project intended for implementation. Students will work with the principles of contextuality and the challenges related to building in flood prone areas.

In the design process, winning submissions will specifically address designing to withstand flooding while responding to all of the following issues through residential design innovation.

Design for **Feasibility in Flood Plain**

Design for **Visual Appeal**

Design for **Affordability**

Design for **Contextuality**

Design for **Livability**

Design for **Reapplicability**

Design for **Sociability**

Design for **Sustainability**

Awards

Four Entries will be chosen for merit recognition. Two winning entries will be selected from the four merit entries based on competition criteria listed below. The winning entry will receive a \$1500 cash prize and the runner up will receive a \$500 cash prize.

Project stages, 2014—The big picture

Dates	Description
January 14	Registration Deadline
January 15	First Meeting
Jan 23-Feb1	Weekend Meetings and Charrettes
February 9	Private Review of Submission Presentation of selected designs to juried panel Prizes announced and evening open house exhibit

All submissions become the property of the University of Cincinnati and may be used for the benefit of East End only. UC and the East End have no obligation to use the designs or concepts of the winning entries. The Award Jury reserves the right to withhold awards from any and all entries based on failure to meet competition and schematic design criteria.

In providing this competition brief, the sponsors have endeavored to create a clear set of requirements for the competition, but do not guarantee conflicting information. It is the responsibility of the entrant to notify the competition organizer (by email at frank.russell@uc.edu)

before the submission deadline) of any conflicts or inconsistencies that may jeopardize the eligibility or completeness of their submission. No response is guaranteed, but the Jury will take these notifications into account during the judging process.

Eligibility

Competition for UC students:

- Studio class or independent study class under Frank Russell
- Enrolled in UC Program
- Open to all levels – under graduate 3rd year and above, graduate, PhD

The competition fulfills requirements for 3-hr. independent study or class upon registration. The competition is open to undergraduate or graduate students of planning, architecture and interior design, design, or engineering in 3rd year and above. Individual entries may be the product of an individual or of a team of no more than two members. All entrants must register at the opening meeting to be eligible.

Registration

Registration for the competition will be for a 3 credit hour independent study or class with instructor Frank Russell and offered as:

Service Learning Collaboratory: SLCE 5001-001 Planning Independent Study: PLAN 7062-10

The Site

The study site is Parcel ID 028-002-0106-00 at 238 Strader Ave. off Riverside Dr. in the area often referred to as the East End “Garden District.” The lot was selected because it is representative of the typical 25 ft. x 100 ft. size and homes nearby illustrate the current context of the neighborhood.

The Program

The house is targeted for single professionals and small families living on a middle income. Therefore, the house would need to include at least two bedrooms. Consideration should also be given to the inclusion of workspace for a live-work arrangement, a growing trend in our society. This might be a dedicated workspace or potential use of a third bedroom.

The anticipated residence construction budget is \$200,000 maximum. The completed structure should include two bedrooms, two baths, and kitchen, living and workspace. The budget estimate is based on the target lot size of 25 x 100 sq. ft., which is typical of lots in the Garden District. Each house must fit within the required setbacks and minimum areas and dimensions as determined by City of Cincinnati and Ohio building codes.

Most importantly, the dwelling must comply with flood plain construction criteria, which generally state that the building must not impede flow of the river and minimize damage in the event of flooding. These specifications will be provided with the class reference materials.

Required competition submission

One 36” x 52” Poster (vertical format) submitted as a digital file in pdf format not to exceed 20 mb. Names of competitors will not appear on the poster, nor in the file name. If your name or likeness appears on your poster, you will be disqualified. A number issued to each competitor upon registration will be used on the pdf file name (see pdf file naming convention below). Submission

will be made to the course Blackboard before 10am on the submission deadline. No submissions will be accepted after the submission deadline.

Entry posters will be printed at the Niehoff Urban Studio at no cost to the competitor. It is recommended that competitors visit the Niehoff Studio to inspect their print between 10 and 12pm on the submission day to certify accuracy of printing. To avoid delays caused by technical problems, allow sufficient time for file compression and submission to blackboard.

Required Poster Contents

Detailed Site Plan at 3/16" scale showing relationship of house to lot and surrounding community. Site plan must include topography, drive and walkways, existing and proposed vegetation. Show required zoning setbacks.

Detailed Floor Plan(s) at 1/4" scale showing interior furnished spaces, fixtures, proposed finishes, and dimensions. Must include furniture layout and all fixtures.

Detailed Elevations at 1/4" scale showing exterior finishes and fenestration, with relevant site improvements, and dimensions

Detailed Section(s) at 1/4" scale showing interior space and relation of building to site and topography, and dimensions.

Diagrams that illustrate conceptual or practical components such as accessibility, structural/mechanical, site strategies, etc., are highly recommended.

All program components should be clearly labeled on all drawings. Include text (no smaller than 18pt) and/or other illustrations as necessary to fully describe design intent and address competition criteria.

At least one three-dimensional representation in the form of a perspective, axonometric, exploded axonometric, sectional perspective.

Materials Provided

DWG plan file of building site and context

Available Resources

East End Garden District Study: Exhilarate, Activate, Savor report by UC Urban Design Center
Green Futures Scenario Planning in Cincinnati's East End Neighborhood Report by Niehoff Urban Design Studio

Building Codes : Current Ohio Residential Code

Current Cincinnati Zoning Code

Guidelines for Flood Plain Construction

Two question and answer sessions are provided during the competition period. It is the entrant's responsibility to attend all class meetings in order to garner any necessary information for clarifying program and competition issues. No other questions will be answered outside of these meetings. Competitors are responsible for their own research.

Available References

The following provide basic information concerning the competition program

Schedule

Timing:	Event
January 14	Registration Deadline
January 15	Class Orientation – required
January 23, 24, 25	Opening Workshop – mandatory Introduction Background Technical information Site Visits (provide your own transportation)
Jan. 30, 31, Feb. 1	Workshop 2 - mandatory
February 9	Submission Deadline 12:01am
5:30	Present designs to Juried Panel in afternoon
7:00	Prizes announced and evening open house exhibit

Process and Judging Criteria

Each design individual or team will be charged to develop a conceptual design for one new infill building. Their design must meet the program and construction guidelines established by flood plain and be appropriate for the proposed site for the future project. A panel consisting of five members will judge entries. The judges will be selected from the DAAP School of Architecture Faculty and knowledgeable representatives from the East End Community. Up to four designs will be identified for merit and ranked according to “promise”. Of these entries, two designs will be selected as the winning entries.

Competition Criteria

Competition entries will be judged according to the following criteria:

The Design must meet all building and zoning code to be eligible.

Design for Feasibility in a Flood Plain (20 points)

The design should incorporate methods of construction that are compliant with readily available means and materials. The design must meet flood plain building regulations and houses should be tolerant of flooding conditions.

Design for Visual Appeal (20 points)

The design should be recognized for formal integrity and high aesthetic quality

Design for Affordability (10 points)

The design should illustrate construction techniques and materials use that addresses affordability. The design should illustrate innovations in operations and maintenance that achieve affordability. The design should minimize the footprint of the house.

Design for Contextuality (10 points)

The design should be compatible with the surrounding architectural context and circulation patterns.

Design for Livability (10 points)

The design should support the comfort of its occupants in ergonomics, thermal comfort, visual quality, and accommodation.

Design for Replicability (10 points)

The housing design should be one that could serve as a prototype and reapplied to other single or multiple lots in the Garden District.

Design for Sociability (10 points)

The design should emphasize appropriateness for the disposition of its potential owner and its place within its neighborhood setting. It should be inviting to interactions with others via “front porch” concept of traditional homes. The design should support the social capital of the community.

Design for Sustainability (10 points)

The design should demonstrate high standards in sustainability including reduced energy use and environmental impact as measured by the LEED-H Checklist.

Criteria for Schematic Design Submission

The supervising Architect, East End officials, and sponsors will certify that the winning entrant’s schematic design submission meets certain criteria.

Are the materials and construction methods clear and well documented?

Are the geometries, dimensions, and quantities outlined?

Are structural and mechanical issues addressed adequately to show feasibility?

Does the design meet Construction Standards?

Does the design meet building and zoning codes?

Will the proposed design be cost effective?

Post-Competition Activity and Stipend

Winning entrants may be invited to enter a contract to continue work to develop their winning designs with appropriate compensation. The designers of the selected winning entries will be asked to develop their proposal in adequate detail and intent to determine feasibility for further schematic design, design development, and construction documentation based on the schematic design criteria listed below. Should the sponsors build the winning designs, they must complete enough to be translated into construction documents that are credibly “buildable”. Additional submissions will be required as necessary to clarify designer’s intent and feasibility. These submissions may include: foundation and roof plans, all exterior elevations, additional building sections, framing diagrams, mechanical systems diagrams, sketch details of non-conventional assembly and fastening, window and door sizes and specifications, materials description, and other relevant details. Resource members will be available to consult with winning entrants. This work would be conducted at the UC Community Design Center under the supervision of a Registered Architect. It is the intention of

the sponsors that this post competition work will result in a complete set of construction documents for each house. Winning entrants may be further invited to assist in the observation of construction and in the construction itself.